

REMARKS/ARGUMENTS

Rejection of claims 1-12 under 35 U.S.C 102(e) as being anticipated by Sakaki (U.S.

5 **7,002,812).**

Claims 1-12 have been amended to overcome this rejection. According to the amended claim 1 of the claimed invention, a liquid crystal display module having a display area and a peripheral area is provided, in which the liquid crystal display module 10 includes at least a gate driver chip and a source driver chip disposed thereon.

Specifically, the gate driver chip and the source driver chip are mounted on the glass substrate with a chip-on-glass technology, and the source driver chip and the gate driver chip of the claimed invention are adhered on the glass substrate with an anisotropic conductive film.

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Despite the fact that Sakaki also teaches a liquid crystal module having a plurality of source driver circuit boards and gate driver circuit boards mounted thereon, the source driver circuit boards and the gate driver circuit boards are fabricated with a chip-on-film (COF) technique, as stated in column 10 lines 19-20 of the reference. In contrast to the 20 claimed invention, the source or gate driver chip 76 taught by Sakaki is first adhered on a driver circuit board 78, which is further attached to a substrate with an anisotropic conductive film 92, as shown in Fig. 8B of the reference. In other words, the mechanism for mounting driver chips on a substrate taught by Sakaki is significantly different from the claimed invention.

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Additionally, the thickness of each of the gate driver chip and the source driver chip of the claimed invention is less than 0.3 mm, and the gate driver chip and the source driver chip are disposed on a non-flexible substrate. Specifically, each driver chip of the

claimed invention is fabricated with a thickness of less than 0.3 mm to prevent problem such as curtain mura. Sakaki in column 11 lines 37-42 of the cited reference only teaches that the driver circuit boards 36 are made of flexible materials having a thickness of 40 μ m or less, but never suggests the thickness of each driver chip to be less than 0.3 mm. In other words, Sakaki only teaches the thickness of the driver circuit board that carries the driver chips, but fails to teach the thickness of each driver chip, as stated in the claimed invention.

The amended claim 6 of the claimed invention recites another liquid crystal display module having a display area and a peripheral area, in which the liquid crystal display module includes at least a gate driver chip and a source driver chip disposed thereon. The gate driver chip and the source driver chip of this claim are also mounted on the glass substrate with a chip-on-glass technology. Similar to the arguments made for claim 1, despite the fact that Sakaki teaches a liquid crystal module having a plurality of source driver circuit boards and gate driver circuit boards mounted thereon, the source driver circuit boards and the gate driver circuit boards are made with a chip-on-film technique. Additionally, Sakaki only teaches the thickness of the driver circuit board that carries the driver chips, but fails to teach the thickness of each driver chip to be less than 0.3 mm, as stated in the claimed invention.

Since the technique involved for mounting the driver chips on a substrate by Sakaki is significantly different from the claimed invention and the thickness of each driver chip is undefined in Sakaki's invention, applicant asserts that Sakaki does not teach all of the limitations of the amended claims 1 and 6. Reconsideration of the amended claims 1 and 6 is therefore politely requested. As claims 2-5 are dependent upon claim 1 and claims 7-12 are dependent upon claim 6, applicant asserts that if claims 1 and 6 are found allowable, claims 2-5 and 7-12 should additionally be found allowable. Reconsideration of the claims 2-5 and 7-12 is politely requested.

New Claims 13-19

Independent claim 13 has been added as a device claim describing an additional embodiment of the claimed invention. Preferably, claim 13 highlights that either the gate driver chip or the source driver chip is mounted on the glass substrate with a chip-on-glass technology. No new or additional matter was used in the above claims.

With regards to patentability, applicant asserts that claims 13-19 should be found patentable over the Examiner's cited reference, as Sakaki only teaches that the driver chips are mounted on a flexible substrate with a chip-on-film technology and the thickness of the flexible substrate being 40 μ m or less. Applicant thus asserts that Sakaki fails to teach that the driver chips are mounted on a substrate with a chip-on-glass technology and the thickness of each driver chip is less than 0.3 mm, as stated in the claimed invention. Applicant kindly requests the Examiner to evaluate new Claims 13-19 in consideration for their allowance.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

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Sincerely yours,

Winston Hsu

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